

**ADDENDUM #3**  
RIVERSIDE COMMUNITY UTILITY AND STREET IMPROVEMENTS  
CITY OF DULUTH  
PROJECT No. 0699SN/TR  
BID No. 11-0512  
October 12, 2011

**NOTICE**

This Addendum is issued to modify, explain or correct the original drawings, specifications and/or previous addenda and is hereby made a part of the Contract Documents. Please attach this Addendum to the specification and note receipt of this Addendum on the Request for Bid.

**DRAWINGS**

1. The Fire Hydrant Setting Detail - HDPE detail (W-4A) and Water Valve Box – HDPE Main detail (W-17A) on sheet 78 are revised to include 3# Magnesium Anode as shown on the attached details.
2. The 4" & Larger Water Service – HDPE detail (W-5B) on sheet 80 is revised to include 3# Magnesium Anode as shown on the attached detail.
3. Note number 4 on the Typical Sewer Service Connection detail (SAN-2) on sheet 82 is revised to read as follows:
  4. For new services, pipe to stop at right of way, provide a water tight cap.
4. The Fabric Wrapped Catch Basin Casting detail (STRM-4) and Fabric Wrapped Manhole detail (STRM-5) on sheet 87 are supplemented with the following:
  - Locating wire shall be connected to storm sewer structures similar to locating wire connections at sanitary sewer manholes. Refer to the Sanitary Sewer Manhole Seal detail (SAN-3) on sheet 82 for tracer wire connection details.
5. The Connect I&I Service – Type A detail (I&I-1) and the Connect I&I Service – Type C detail (I&I-3) on sheet 90 are supplemented with the following notes:
  - For new services, pipe to stop at right of way, provide a water tight cap.
  - #12 gauge green insulated copper tracer wire shall be installed with storm main and I&I services. Tracer wire shall run from the wye and terminate in a flush mounted tracer box with green cast iron lockable top. Tracer wire terminal boxes shall be installed directly above the service or as determined by the engineer.
  - The tracer wire shall remain continuous to the greatest extent possible. Splices in the tracer wire shall be made with split bolt or compression type connectors. Wire nuts shall not be used. A water-proof connection is necessary to prevent corrosion.

## SPECIFICATIONS

1. Section D. Basis of Payment of 2504 Water Main and Service Line Installation of the City of Duluth Standard Construction Specifications is supplemented with the following:
  - a. Payment under the water valve and hydrant bid items at the Contract unit price shall include all costs of furnishing and installing Magnesium Anodes incidental.
2. Section 2503/2504 Locating Wire for Water and Sanitary Sewer of the City of Duluth Standard Construction Specifications is supplemented with the following:

Locating wire shall be installed on all PVC storm sewer mains and I&I services.

3. SP-12 (1903) Increased or Decreased Quantities on page 10 of the Special Provisions is supplemented with the following:

The provisions of Mn/DOT 1903 regarding overruns and underruns shall not apply to the following items of work under this contract:

2104.525	Fill and Abandon Pipe Sewer	Lin. Ft.
2104.602	Disconnect & Plug Pipe Sewer at Manhole	Each
2104.602	Abandon Sanitary Manhole (Remove Casting)	Each
2104.602	Abandon Sanitary Manhole (Partial Depth MH Removal)	Each
2104.602	Abandon Sanitary Manhole (Full Depth MH Removal)	Each

4. SP-14 (2104) Abandon Sanitary Sewer Pipe and Manholes on pages 10-11 of the Special Provisions is deleted and replaced with the following:

### (2104) ABANDON SANITARY SEWER AND MANHOLES

This work shall consist of filling, sealing, and abandoning the existing sanitary pipe sewer and manhole structures in accordance with the applicable Mn/DOT and Duluth Standard Specifications, and the following:

The existing sanitary pipe sewer system shall be abandoned after the new sanitary sewer system is fully operational and all residents have disconnected from the old sewer. The Contractor should anticipate that the resident disconnection period will extend a minimum of 8 months after completion of the new sanitary sewer. The Engineer will notify the Contractor with authorization to proceed after all of the residents area have disconnected. Sewer abandonment work may occur in multiple phases.

SP-14.1        Fill and Abandon Pipe Sewer. The abandoned pipe sewer shall be filled with grout material and capped water tight. Filling and capping of the abandoned sewer pipe shall be considered incidental work for which no direct payment will be made.

- a. Contractor shall provide a cement base grout to the voids in the sewer.
- b. The grout material must have a minimum compressive strength of 100 psi and shall have the flow characteristics and consistency appropriate for being pumped

into the pipe.

- c. The contractor shall provide a grout installation plan and grout design mix for approval by the Engineer.

SP-14.2 Disconnect & Plug Pipe Sewer at Manhole. Where the existing sewer manhole will remain in service, the abandoned sewer pipe shall be disconnected and removed from the manhole. The resulting hole in the manhole shall be plugged concrete block and non-shrink grout, unless otherwise directed by the Engineer.

SP-14.3 Abandon Sanitary Manhole. Where the existing sanitary sewer manhole will be abandoned, the bottom shall be fractured (or holes drilled) to allow drainage and the structure shall be filled granular backfill. The casting frame and cover shall be removed and delivered to City. The Contractor shall remove a portion of the manhole structure or leave it to remain, as directed by the Engineer. Abandon sanitary manhole shall vary as follows:

- a. Remove Casting. Where access to the manhole is restricted and/or there is risk of damage to houses, decks or garages; the Contractor shall fracture the bottom, remove the casting, and fill the structure with granular backfill. The manhole structure will remain.
- b. Partial Depth Manhole Removal. Where access to the manhole is restricted and preservation of the adjacent area is desired; the Contractor shall fracture the bottom, remove the casting, remove the upper 4 feet (or cone section) of the manhole structure, and fill the remaining structure and excavation with granular backfill.
- c. Full Depth Manhole Removal. Where directed by the Engineer; the Contractor shall fracture the bottom, remove the casting, remove the upper 8 feet of the manhole structure, and fill the remaining structure and excavation with granular backfill. If the manhole is deeper than 8 feet, the manhole structure below 8 feet will remain.

SP-14.4 Where the existing sewer manhole will be fully removed (including bottom), the structure will not be abandoned and the provisions of 2104 shall apply.

SP-14.5 Measurement will be made by the length of pipe center to center of manhole and the number of manholes abandoned as specified.

SP-14.6 Payment will be made under the following pipe sewer abandonment items at the Contract bid prices, which shall be payment in full for all labor, equipment, and materials necessary to abandon pipe sewer and dispose of waste.

Payment will be made under Item 2104.602 Abandon Sanitary Manhole (Type) at the Contract bid price, which shall be payment in full for all labor, equipment, and materials necessary to abandon sanitary manholes and dispose of waste

Item	Description	Unit
2104.525	Fill and Abandon Pipe Sewer	Lin. Ft.
2104.602	Disconnect & Plug Pipe Sewer at Manhole	Each

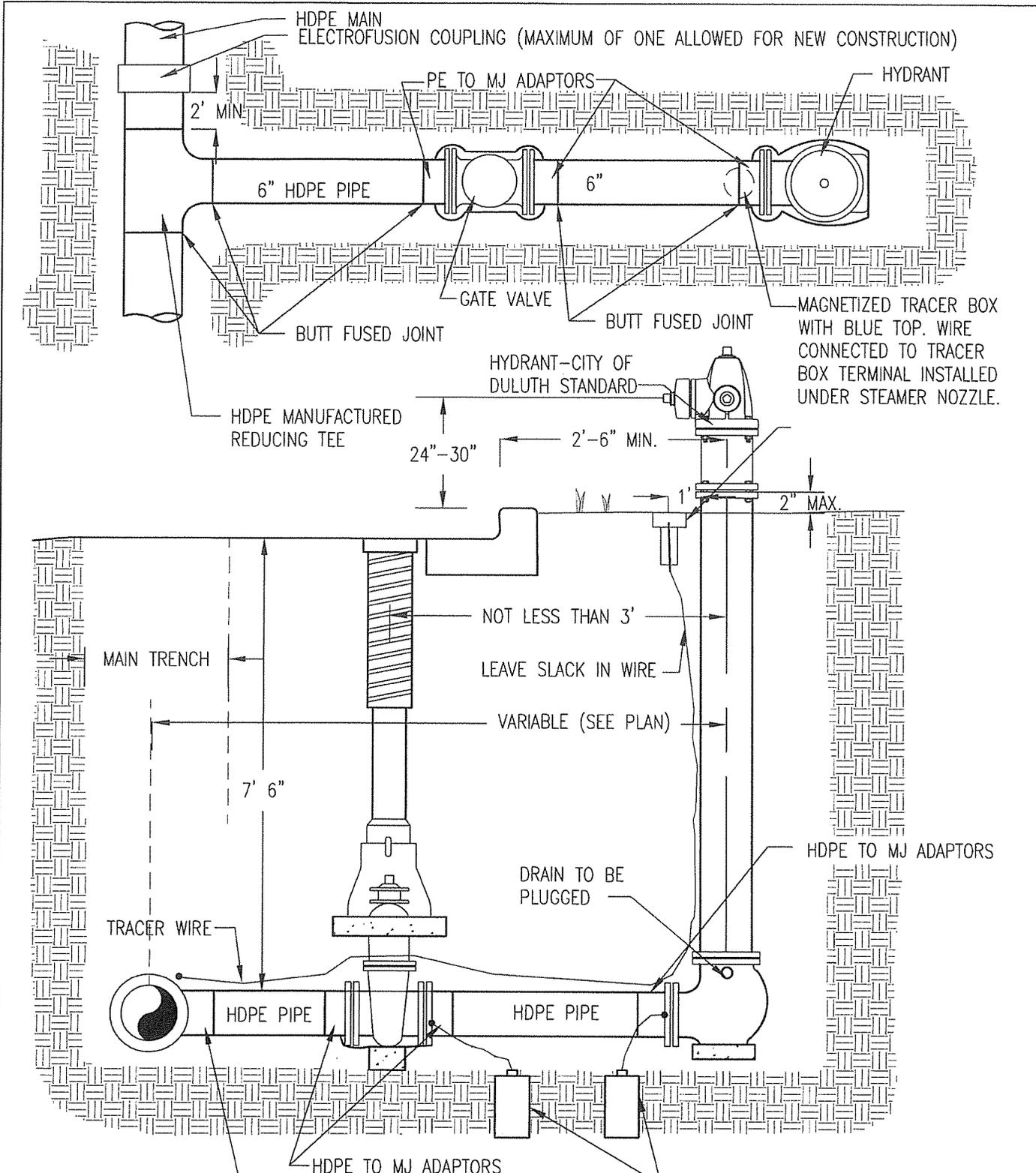
2104.602	Abandon Sanitary Manhole (Remove Casting)	Each
2104.602	Abandon Sanitary Manhole (Partial Depth MH Removal)	Each
2104.602	Abandon Sanitary Manhole (Full Depth MH Removal)	Each

Payment for remove manhole, and restoration of the site will be made under other contract bid items.

### **INFORMATION TO BIDDERS**

1. Existing Reinforced Steam Tunnel. Original construction drawings for the existing reinforced concrete tunnel (duct) that housed the steam pipes indicate that the structure consists of 4" thick reinforced poured concrete walls. The inside dimensions of the tunnel ranges from 14" to 24" wide by 12" to 24" high.

END OF ADDENDUM



**NOTES**

1. VALVES SHALL BE CONNECTED DIRECTLY TO MECHANICAL JOINT ADAPTORS.
2. USE EPOXY COATING ON VALVE AND HYDRANT BASE
3. ALL BOLTS SHALL BE COR-TEN WITH ZINC ANODE CAPS CONFORMING TO ASTM B-418 FOR ALL MECHANICAL JOINT FITTINGS. ANODE SIZE - REGULAR.

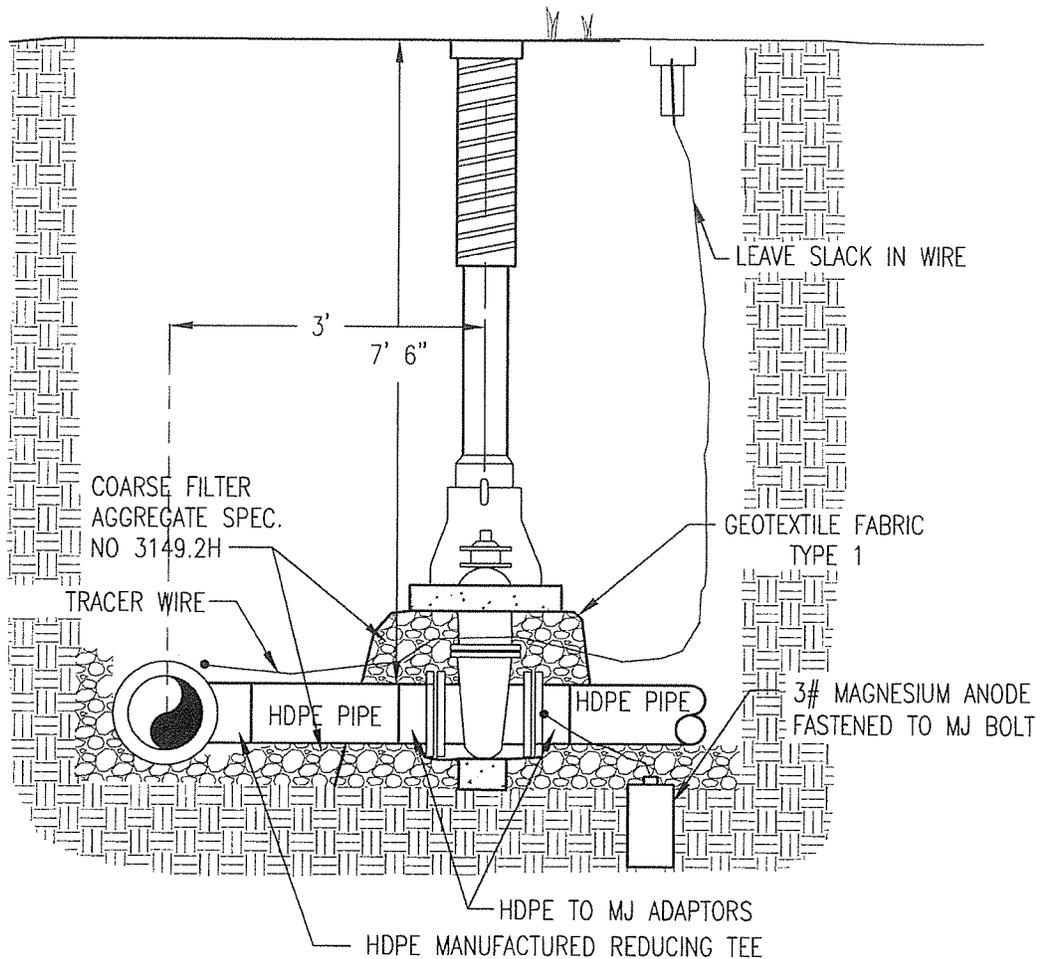
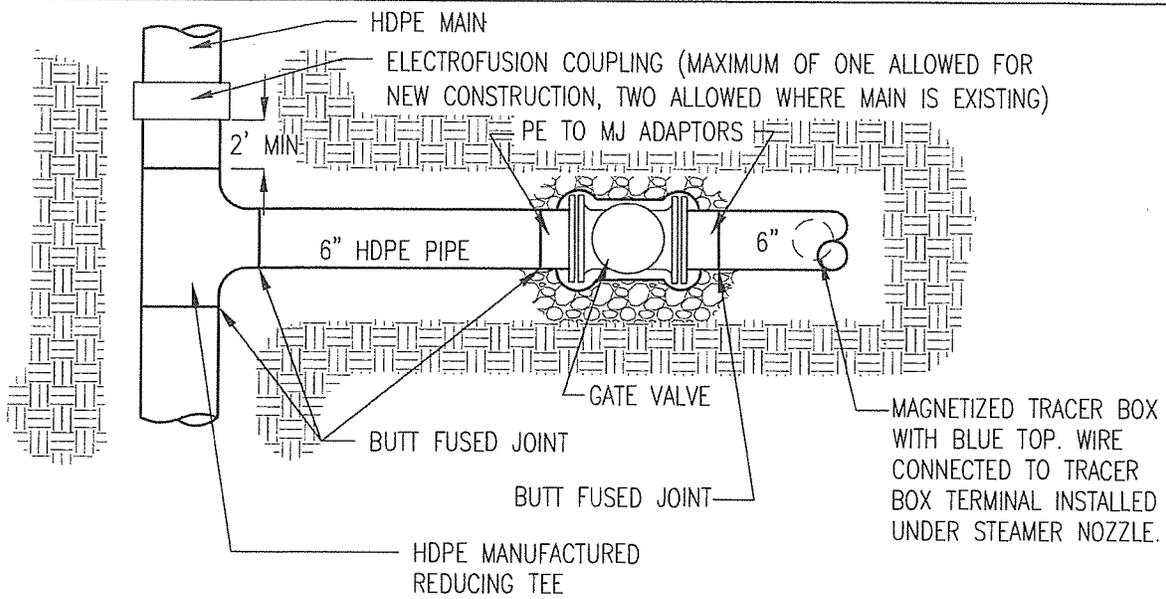
**FIRE HYDRANT SETTING DETAIL – HDPE**

W-4A

REVISED/APPROVED 9/29/11

CITY OF DULUTH STANDARD DETAIL  
DEPT. OF PUBLIC WORKS AND UTILITIES

NO SCALE



NOTES

1. VALVES SHALL BE CONNECTED DIRECTLY TO MECHANICAL JOINT ADAPTORS.
2. ALL BOLTS SHALL BE COR-TEN WITH ZINC ANODE CAPS CONFORMING TO ASTM B-418 FOR ALL MECHANICAL JOINT FITTINGS. ANODE SIZE - REGULAR.

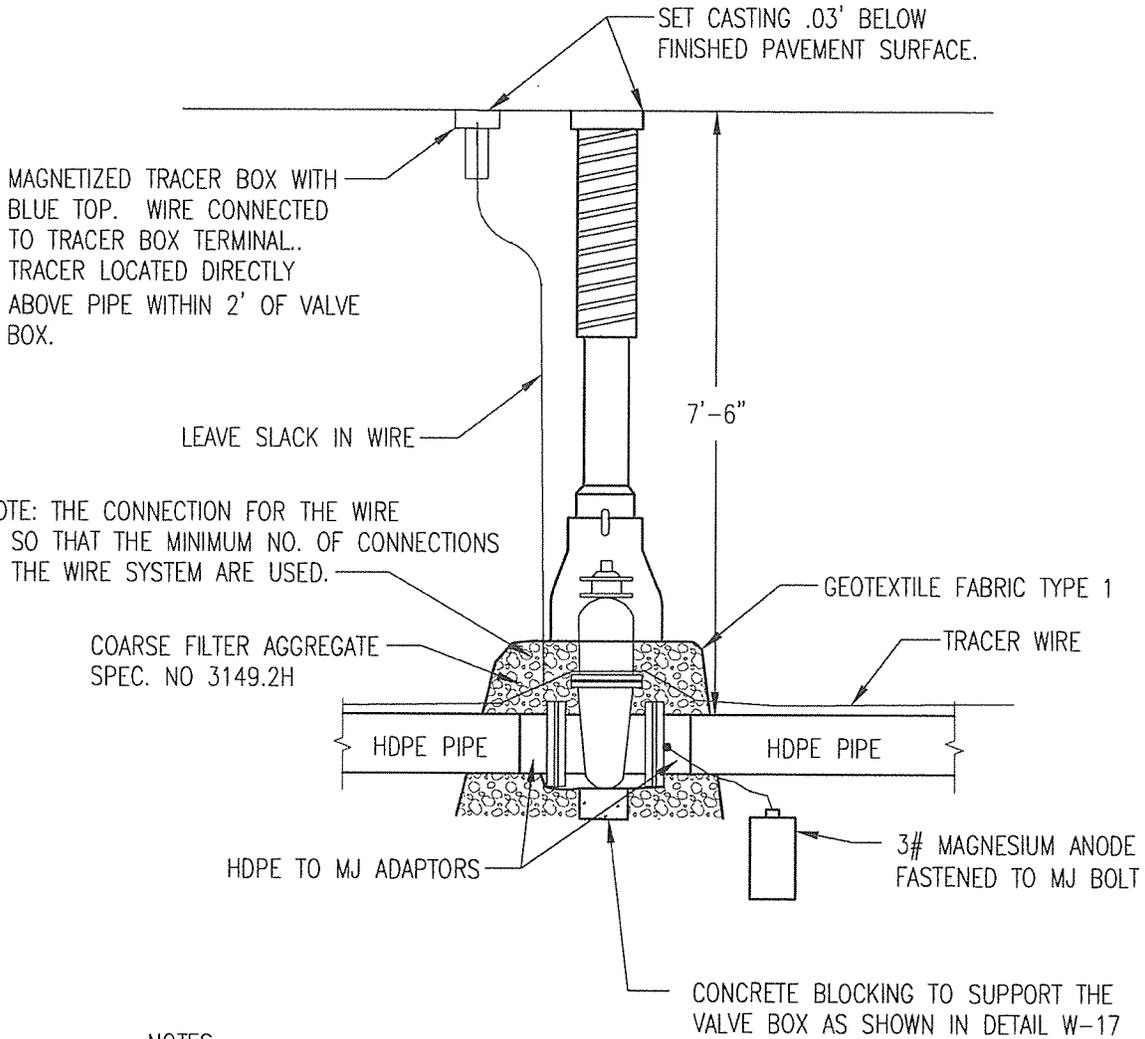
4" & LARGER WATER SERVICE - HDPE

W-5B

REVISED/APPROVED 9/29/11

CITY OF DULUTH STANDARD DETAIL  
DEPT. OF PUBLIC WORKS AND UTILITIES

NO SCALE



NOTES:

1. VALVES SHALL BE CONNECTED DIRECTLY TO HDPE WITH HDPE TO MECHANICAL JOINT ADAPTORS.
2. USE EPOXY COATING ON EXTERIOR OF VALVES.
3. ALL BOLTS SHALL BE COR-TEN WITH ZINC ANODE CAPS CONFORMING TO ASTM B-418 FOR ALL MECHANICAL JOINT FITTINGS. ANODE SIZE - REGULAR.
4. FOR OPEN CUT PIPE INSTALLATIONS, ELECTROFUSION COUPLINGS ARE NOT ALLOWED FOR CONNECTION OF HDPE TO MJ ADAPTORS. FOR DIRECTIONAL DRILLED INSTALLATIONS, ONE ELECTROFUSION COUPLING MAY BE USED PER VALVE.

WATER VALVE BOX - HDPE MAIN

W-17A

REVISED/APPROVED 9/29/11

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NO SCALE